

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Previously Presented) A compressor comprising:
a cylindrical sealed container connected to an intake pipe and a discharge pipe;
a compression mechanism being disposed in the sealed container to compress gas introduced from the intake pipe and discharge the gas into the sealed container, the compression mechanism including a drive shaft and an intake passage extending in a radial direction thereof, the intake passage opens in an outer face of the compression mechanism such that an opening part of the intake passage in the outer face of the compression mechanism faces a terminal end of the intake pipe;
a motor disposed in the sealed container and operatively connected to the drive shaft of the compression mechanism;
an elastic support member supporting the compression mechanism and the motor within the sealed container; and
a sealing mechanism including a sealing member pressed against a sealed face formed by one of a peripheral part of the intake passage in the outer face of the compression mechanism and a part of an inner face of the sealed container which faces the peripheral part to connect the intake pipe and the intake passage with each other by sealing a gap between the compression mechanism and the sealed container.
2. (Previously Presented) The compressor of claim 1, wherein
the part of the inner face of the sealed container serves as the sealed face,

the outer face of the compression mechanism has an annular concave groove that is formed to surround the opening part of the intake passage in the outer face of the compression mechanism, and

the sealing member is a ring shaped member, which is fitted in the concave groove and which is interposed between a bottom face of the concave groove and the sealed face so as to be deformed elastically therebetween.

3. (Previously Presented) The compressor of claim 2, wherein the sealing member is an O ring.

4. (Previously Presented) The compressor of claim 2, wherein the sealing member has a U-shaped cross sectional profile so as to be elastically deformed in a thickness direction.

5. (Previously Presented) The compressor of claim 1, wherein the sealed container includes a coupling member having a tip end face facing the peripheral part of the intake passage and a base end to which the intake pipe is mounted, the peripheral part of the intake passage serves as the sealed face, a tip end part of the coupling member has a cylindrical shape forming a cylindrical portion, the sealing member is a ring shaped member with a rectangular cross sectional profile and is fitted freely to the cylindrical portion, and the sealing mechanism includes a pressing member applying a pressing force on the sealing member so that a tip end face of the sealing member is in contact with the sealed face.

6. (Previously Presented) The compressor of claim 5, wherein
the pressing member is a spring that contacts a base end face of the sealing member
and the coupling member.

7. (Previously Presented) The compressor of claim 6, wherein
the sealing member has an entire inner peripheral face in sliding contact with an outer
peripheral face of the cylindrical portion.

8. (Previously Presented) The compressor of claim 5, wherein
the sealing member has an inner peripheral groove formed around an entire perimeter
of an inner peripheral face of the sealing member, and
the sealing mechanism includes an O ring fitted in the inner peripheral groove and in
contact with an outer peripheral face of the cylindrical portion.

9. (Previously Presented) The compressor of claim 5, wherein
the pressing member is an O ring that contacts both a base end face of the sealing
member and the coupling member.

10. (Previously Presented) The compressor of claim 1, wherein
the sealed container includes a cylindrical shell extending vertically, an upper head
that blocks an upper end of the shell, and a lower head that blocks a lower end of the shell,
the upper head has a lower end that is fitted inside the shell, and

one of the compression mechanism and the motor includes a stopper that restricts displacement of the compression mechanism and the motor by contacting the lower end of the upper head.

11. (Previously Presented) The compressor of claim 1, wherein the compression mechanism is arranged below the motor in the sealed container, the compression mechanism is fixed to the elastic support member by a plate-shaped stay member and has a discharge passage formed in a lower face of the compression mechanism for discharging compressed gas into the sealed container, and the stay member covers an opening part of the discharge passage in the lower face of the compression mechanism.

12. (Previously Presented) The compressor of claim 5, wherein the sealing mechanism includes an outer peripheral groove formed around an entire perimeter of an outer peripheral face of the cylindrical portion, and an annular split ring member fitted in the outer peripheral groove, with an outer peripheral face of the split ring member being pressed against an inner peripheral face of the sealing member by a restoring force of the split ring member which expands naturally in a radial direction to seal a gap between the cylindrical portion and the sealing member.

13. (Previously Presented) The compressor of claim 12, wherein the sealing member and the split ring member are made of metal.

14. (Previously Presented) The compressor of claim 1, further comprising:

a differential pressure canceling mechanism configured and arranged to make intake gas pressure work on the compression mechanism to reduce a pressing force by the discharge of the gas within the sealed container which works on the compression mechanism towards the intake pipe.

15. (Previously Presented) The compressor of claim 14, wherein the compression mechanism includes a rotary fluid machinery having a compression chamber formed between an inner peripheral face of a cylinder and an outer peripheral face of a piston, and

the differential pressure canceling mechanism is configured and arranged to make the intake gas pressure work on an outer face of the cylinder of the compression mechanism.

16. (Previously Presented) The compressor of claim 15, wherein the differential pressure canceling mechanism is configured and arranged to make the intake gas pressure work on a part opposite the intake passage in the outer face of the cylinder.

17. (Previously Presented) The compressor of claim 15, wherein the differential pressure canceling mechanism includes an intake pressure chamber formed between the inner face of the sealed container and the outer face of the cylinder to receive the intake gas pressure, and a communication passage fluidly connecting the intake pressure chamber with the intake passage of the compression mechanism such that the intake gas pressure of the intake pressure chamber works on the cylinder.

18. (Previously Presented) The compressor of claim 17, wherein the communication passage of the differential pressure canceling mechanism is formed in the cylinder.

19. (Previously Presented) The compressor of claim 17, wherein the communication passage of the differential pressure canceling mechanism is formed as an arc shape extending along the inner peripheral face of the cylinder.

20. (Previously Presented) A compressor comprising:
a cylindrical sealed container connected to an intake pipe and a discharge pipe;
a compression mechanism having a cylindrical outer shape and being disposed in the sealed container to compress gas introduced from the intake pipe and discharge the gas into the sealed container, the compression mechanism including a drive shaft and an intake passage opening in an outer peripheral face of the compression mechanism such that an opening part of the intake passage in the outer face of the compression mechanism faces a terminal end of the intake pipe;

a motor disposed in the sealed container and operatively connected to the drive shaft of the compression mechanism;

an elastic support member supporting the compression mechanism and the motor within the sealed container; and

a sealing mechanism configured and arranged in a gap between the outer peripheral face of the compression mechanism and an inner peripheral face of the sealed container that face each other to form a low-pressure space that communicates with the intake passage and the intake pipe.

21. (Previously Presented) The compressor of claim 20, wherein the sealing mechanism has at least one O ring arranged around an entire perimeter of the outer peripheral face of the compression mechanism at each side of the opening part of the intake passage.

22. (Previously Presented) The compressor of claim 20, wherein the outer peripheral face of the compression mechanism has at least one concave groove formed around an entire perimeter in the outer peripheral face of the compression mechanism at each side of the opening part of the intake passage,

the sealing mechanism includes an annular split ring member which is fitted in the concave grooves, and

an outer peripheral face of the split ring member presses against the inner peripheral face of the sealed container by a restoring force of the split ring member which expands naturally in a radial direction to seal a gap between the compression mechanism and the sealed container.

23. (Previously Presented) The compressor of claim 22, wherein the split ring member is made of metal.

24. (Previously Presented) The compressor of claim 20, wherein the compression mechanism has an oil return passage extending in an axial direction of the compression mechanism.